# Anybus Communicator - Modbus RTU Server to PROFIBUS DP Device

**Item number: ABC4028-A**

The Anybus Communicator Modbus RTU Server to PROFIBUS DP device enables you to connect any Modbus RTU control system to any PROFBUS DP control system. Anybus Communicators ensure reliable, secure, high-speed data transfers between different industrial networks. They include built-in cybersecurity features and are compliant with the Cyber Resilience Act (CRA). Thanks to our intuitive web-based user interface, they're also incredibly easy to use.



*A protocol converter that connects Modbus RTU and PROFIBUS control systems*

## Features and benefits

**Transfer 1500 bytes to and from Modbus RTU controller (PLC)**

Transfer up to 1500 bytes in each direction (3000 bytes total) via RS232/RS485 interfaces with baud rates up to 128,000 bit/s. Modbus RTU Server (slave) supporting Modbus diagnostics and device identification.

**Instant data transfer**

The Communicator transfers data instantly between networks, with processing time so low you don’t even need to count it, as it’s in line with network jitter. Just add the cycle times of both networks to get the total transfer time.

**Diagnostics and support**

The user interface shows connection status, allowing you to monitor the data going through the gateway. Monitor and control offline behavior via the Status Byte and Clear Data features. Our global support team is ready to help if needed.

**Secure and segment networks**

Secure boot blocks malware, while a security switch locks configurations to prevent unauthorized changes. Network segmentation is inherent in the design, as each network is run separately, with only configured data transferred between networks.

**Cyber Resilience Act (CRA)-ready**

Developed under an IEC 62443-4-1 certified process, with HTTPS configuration, role-based access control, and a physical security switch to help meet CRA requirements.

**Transfer 244 bytes to and from PROFIBUS controller (PLC)**

Transfer up to 244 bytes in each direction (488 bytes total). PROFIBUS DP device (slave) with automatic baud rate detection. Address setting via rotary switches or web interface. Includes a GSD file.

**Configure via web interface over Ethernet**

With a graphical and responsive web interface, configuration is a breeze. In addition, there's no software to install and the dedicated Ethernet configuration port makes it easy to get started.

**Drop-in replacement**

Already using an X-gateway? Don’t worry, with legacy mode you can continue using the same configuration in your controller/PLC.

**Built for factory floors**

The Gateway is made with industrial-grade components, verified to meet industry standards, and backed by a 5-year warranty. Its slim form factor, front-facing ports, and cable tie make DIN-rail installation easy.

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## General

| | |
|---|---|
| **Net Width (mm)** | 27 |
| **Net Height (mm)** | 144 |
| **Net Depth (mm)** | 98 |
| **Net Weight (g)** | 150 |
| **Packed Width (mm)** | 35 |
| **Packed Height (mm)** | 170 |
| **Packed Depth (mm)** | 115 |
| **Packed Weight (g)** | 185 |
| **Operating Temperature °C Min** | -25 |
| **Operating Temperature °C Max** | 70 |
| **Storage Temperature °C Min** | -40 |
| **Storage Temperature °C Max** | 85 |
| **Current Consumption Type Value at Vcc Nom (mA)** | 90mA @ 24V DC (2.2W) |
| **Current Consumption Max value at Vcc nom (mA)** | 125mA @24V DC (3W) |
| **Input Voltage (V)** | 12-30V DC |
| **Power Connector** | 3-pin, 5.08 Phoenix plug connector |
| **Reverse Polarity Protection** | Yes |
| **Short Circuit Protection** | Yes |
| **Isolation** | Yes |

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## General

| | |
|---|---|
| **Content of Delivery** | Gateway, power connector, start-up guide, compliance information sheet |
| **Mounting** | DIN-rail (EN 50022 standard) |
| **Housing Materials** | PC ABS, UL 94 VO |
| **Packaging Material** | Cardboard |
| **Warranty (years)** | 5 |

## Identification and Status

| | |
|---|---|
| **Product ID** | ABC4028-A |
| **Model Code** | 40-SER-PDP-A |
| **Predecessor** | AB7850-F |
| **Country of Origin** | Sweden |
| **HS Code** | 8517620000 |
| **Dual Usage** | No |
| **Export Control Classification Number (ECCN) (Applies only to the U.S)** | 5A991.b.1 |

## Physical Features

| | |
|---|---|
| **Connectors / Input / Output** | 1x 7-pin, 5.08 Phoenix plug connector;1x D-sub 9-pin female PROFIBUS connector;RJ45 Config port |
| **Push Buttons** | Factory reset |
| **DIP & Rotary Switches** | Security lock switch |
| **Contains Battery** | No |

## Modbus-RTU Features

| | |
|---|---|
| **Modbus-RTU Mode** | Slave mode |
| **Modbus-RTU Supported Functionality** | RS-232; RS-485; Endian conversion; 8 data bit; None, Odd, Even Parity; 1 or 2 stop bit; ABX compatible mode |
| **Modbus-RTU Functions Supported** | 1, 2, 3, 4, 5, 6, 8, 15, 16, 22, 23, 43/14 |

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## Modbus-RTU Features

| | |
|---|---|
| **Modbus-RTU Baud Rate** | 1200,1800,2400,4800,7200,9600,14400,19200,35700,38400,57600,115200,128000 bit/s |
| **Modbus-RTU Input Data Size** | 1500 bytes |
| **Modbus-RTU Output Data Size** | 1500 bytes |

## PROFIBUS Features

| | |
|---|---|
| **PROFIBUS Mode** | DP Device |
| **PROFIBUS Supported Functionality** | PROFIBUS-DP Slave functionality according to extensions of EN 50170 |
| **PROFIBUS Device Address** | 0-125 |
| **PROFIBUS Configuration File** | GSD available |
| **PROFIBUS Baud Rate** | 9600 bit/s - 12 Mbit/s |
| **PROFIBUS Input Data Size** | 244 bytes |
| **PROFIBUS Output Data Size** | 244 bytes |

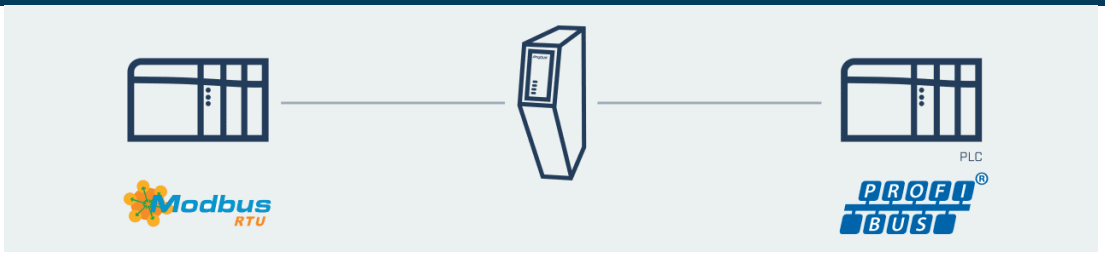
## Certifications and Standards

| | |
|---|---|
| **Protection Class IP** | IP20 |
| **RoHS Compliant** | Yes |
| **Recycle / Disposal** | Yes |
| **Product Certifications** | CE, UL, KC, WEEE, EMC |
| **UL Information** | E214107: Ord.Loc UL 61010-1, CSA C22.2 No. 61010-1, UL 61010-2-201, CSA C22.2 No. 61010-2-201 |
| **Environment** | EN 55016-2-3 Class A, EN 55032 Class A, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6 |

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## Use Case




The Anybus Communicator Modbus RTU Server to PROFIBUS IO device enables you to connect any Modbus RTU control system to any PROFBUS IO control system.